CLAIMS

1) An electric gas lighter (1; 1a) for generating sparks at one or more burners of a cooking range, and comprising a transformer having a primary winding (4), and a secondary winding divided into a number of coils (8) and having a predetermined number of output terminals (3); the coils being wound on respective axially adjacent portions of a substantially cylindrically symmetrical, tubular drum (10) forming part of a supporting member (6; 6a) made of electrically insulating material and formed in one piece with supports (12) projecting tangentially with respect to the drum and each supporting a respective said terminal (3); characterized in that the coils (8) are connected electrically to one another in series to form one secondary winding, which has been obtained by continuously winding without making cuts an insulated electrically conducting wire (20) onto the drum (10) to form said coils (8); the wire (20) being wound alternately onto the drum (10) in an opposite direction for each coil (8); and the winding direction of the wire being inverted upon the wire (20) engaging a respective common terminal (3) between two adjacent coils.

2) A gas lighter (1; 1a) as claimed in Claim 1, characterized in that each said terminal (3) is defined by a blade contact, e.g. a faston type, for supplying high voltage, in use, to a respective burner; the lighter comprising a number (n) of coils (8) and a number (n+1)

of terminals (3), where (n) is any integer greater than 2.

3) A gas lighter (1; 1a) as claimed in Claim 2, characterized in that said drum (10) has an odd number (m) of winding seats (11), each for receiving said wire (20) wound in a given direction to form a respective said coil (8), and a number (m+1) of said supports (12) for the terminals (3); in the case of a lighter for lighting an odd number of burners, one of said seats and a respective adjacent support not being engaged by said wire.

4) A gas lighter (1; 1a) as claimed in Claim 2, characterized in that said tubular drum (10) has a prismatic tubular member (22) formed in one piece with each said support (12) and for housing a said blade contact (3) fitted to and defining an electric connector with the respective support (12).

5) A gas lighter (1; 1a) as claimed in Claim 4, characterized by also comprising an outer casing (2;2a) made of electrically insulating material and housing said supporting member (6), with said wire wound on the drum (10) to form said coils (8) on the outside of the drum, and with said primary winding (4) inserted coaxially inside said tubular drum; said casing (2; 2a) having a number of openings (40) through which said prismatic tubular members (22) formed in one piece with the supports (12) of the terminals (3) are inserted, so that a subunit, defined by the two, primary and secondary,

windings with the respective supporting member (6; 6a) and terminals (3), can be preassembled and then fitted automatically inside the casing (2; 2a).

6) A gas lighter (1; 1a) as claimed in Claim 5, characterized in that said casing (2; 2a) and said supporting member (6; 6a), with the respective tubular drum (10), respective supports (12), and respective prismatic tubular members (22) for housing the terminals (3), are molded from synthetic plastic material, preferably a polyamide.

7) A gas lighter (1; 1a) as claimed in Claim 1, characterized in that, on the outside, at each said coil (8), said tubular drum (10) is formed in one piece with a number of semiannular partitions (41) for dividing each coil (8) into a number of electrically separate sections.

8) A gas lighter (1) as claimed in Claim 4, characterized in that said terminals (3), with the relative supports (12) and prismatic tubular housing members (22), are located alternately, in an axial direction, on opposite sides of said casing (2).

9) A gas lighter (1a) as claimed in Claim 4, characterized in that said terminals (3) are all located side by side along a same first side (200) of said casing (2a); said terminals (3) being carried by respective supports (12), which are formed in one piece with said drum (10) of the insulating said supporting member (6a), project tangentially with respect to the drum (10), and are all arranged side by side along a same side (600) of

the drum (10).

10) A gas lighter (1a) as claimed in Claim 9, characterized in that said first side (200) of the casing (2a), on which the terminals (3) are all arranged side by side, is selected so as to be opposite a second side (201) of the casing (2a) located on the same side as fastening means (300) integral with the casing (2a) and for clicking the casing (2a) onto an electrically conducting support (C) of an electric household appliance.

11) A method of producing a gas lighter with any number of output terminals, and comprising the steps of:

(a) molding from synthetic plastic material a supporting member (6) comprising a tubular drum (10) and a number of supports (12) for respective electric terminals (3);

(b) assembling a predetermined number of terminals to the supports, possibly leaving one support with no terminal;

(c) assembling the supporting member (6), by means of said tubular drum, to a rotary spindle (50);

(d) securing an insulated electrically conducting wire (20) to a first terminal (3) at a first end of the supporting member, and winding said wire onto the tubular drum (10) to form a first coil (8) by rotating the spindle in a given first direction;

(e) stopping the spindle (50), securing the wire, without cutting it, to a second terminal (3) adjacent to

the coil just formed, and winding said wire onto the tubular drum to form a second coil (8), axially adjacent to the first, by rotating the spindle in a given second direction opposite the first;

(f) repeating step (e) n times to form on the tubular drum a given number of coils (8) all connected electrically in series to one another, and with the terminals interposed between common adjacent coils;

(g) assembling inside the tubular drum a core (5) made of ferrite and having an electric winding (4), to form an assembly constituting a transformer; and

(h) fitting said assembly inside a casing (2), so that said terminals pass through and project from the casing.